

REMARKS

In response to the Office Action dated September 22, 2006, Applicant respectfully requests reconsideration based on the following remarks. Applicant respectfully submits that the claims as presented are in condition for allowance.

Claims 1-14 are pending in the present Application for consideration upon entry of the following remarks. Claims 1-4, 7-9 and 12-14 are amended to better set forth the invention and to provide proper antecedent support.

Support for the amendments to Claims 1, 7 and 12 are at least found in the specification, the figures, and the claims as originally filed. More particularly, support for amended Claims 1, 7 and 12 is at least found in the specification at page 7, lines 9-24 and page 8, line 20 to page 9, line 4, and Figure 4.

No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Objections

Claim 14 is objected to because the phrase "output of a image data" is grammatically incorrect. In response, Claim 14 is amended to recite "output of an image data." Reconsideration and withdrawal of the relevant claim objection is respectfully requested.

Claim Rejections Under 35 U.S.C. §102

The Examiner has rejected Claims 1-5, 7-9 and 11-14 under 35 U.S.C. § 102(b) as being anticipated by Kawaguchi et al., U.S. Patent No. 5,592,199 (hereinafter "Kawaguchi"). Applicant respectfully traverses the rejections.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Amended Claims 1, 7 and 12 recite, *inter alia*:

"an LCD panel including gate lines receiving a gate driving signal and a signal control line transmitting a second control signal an image data externally provided and displaying an image; and

a timing controller providing a first control signal to the gate driver so as to control an output of the gate driving signal and providing the second control signal to the data driver via the signal control line so as to control an output of the image data;
wherein the gate line and the signal control line are disposed on the same substrate.”

In the Office action at pages 2 and 3 of the detailed action, control board 111 of Kawaguchi in Figure 17 and described at Col. 23, lines 29-40 is considered as disclosing the “timing controller” of the claimed invention. Regarding a “signal line,” now amended as a “signal control line,” it is stated in the Office action that it is “clear from Figure 17” that such a signal control line is shown by Kawaguchi and that first circuit wiring 173 in the y-axis is considered as providing the second control signal to the data driver. Applicant respectfully disagrees.

Firstly, Kawaguchi discloses first circuit wiring 173 provided on the LC panel’s 120 inner side of the junction terminals 146,145, extending along a *peripheral portion* of the panel 120 and electrically connecting the junction terminal 146 and the junction terminal 145 to each other. (Col. 23, lines 50-54 and Figure 17.) That is, first circuit wiring 173 is not connected to the control board 111 as disclosed by Kawaguchi, such that the first circuit wiring electrically connects the control board 111 and the ICs 105. Therefore, Kawaguchi does not disclose a timing controller providing a first control signal to the gate driver and providing the second control signal to the data driver via the signal control line of amended Claims 1, 7 and 12.

Secondly, regarding Claim 4, “the outputting gate lines from the ICs” (e.g., 105) is considered as the “gate lines” of the claimed invention.

Kawaguchi discloses the input terminals 144, output terminals 142 and junction terminal 148 provided at the *rear side of the flexible wiring board 104A*. (Col. 23, line 56 to Col. 24, line 8.) *On one side of the flexible wiring board 104A*, second circuit wiring 174 is provided to connect the input terminal 144 to junction terminal 148. (*Id.*) First circuit wiring 173 (considered as the “signal control line”), as best understood from Kawaguchi, is disclosed on the substrate 102. That is, the “outputting gate lines from the ICs” is not formed on the same layer, let alone the same substrate, as the first circuit wiring 173. Therefore, Kawaguchi also does not disclose the gate line and the signal control line are disposed on the same substrate of amended Claims 1, 7 and 12.

Thus, Kawaguchi fails to disclose all of the limitations of amended Claims 1, 7 and 12. Accordingly, Kawaguchi does not anticipate amended Claims 1, 7 and 12. Applicant respectfully submits that Claims 1, 7 and 12 are not further rejected or objected and are therefore allowable. Claims 2-5, 8, 9, 11, 13 and 14 variously depend from Claims 1, 7 and 12, respectively, are not further rejected or objected and are correspondingly allowable as depending upon Claims 1, 7 and 12. Reconsideration, entry of the claim amendments, withdrawal of the relevant § 102 rejections and allowance of Claims 1-5, 7-9 and 11-14 are respectfully requested.

Claim Rejections under 35 U.S.C. §103

The Examiner has rejected Claims 6 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Kawaguchi in view of Kubota et al., U.S. Patent No. 6,791,526 (hereinafter "Kubota"). Applicant respectfully traverses the rejections.

To establish *prima facie* obviousness of a claimed invention, three requirements must be met: (1) There must be some suggestion or motivation, either in the reference themselves or in the knowledge generally available to one of ordinary skill in the art to combine reference teachings; (2) There must be a reasonable expectation of success; and (3) the prior art references must teach or suggest all the claim limitations. (See MPEP § 2143.)

Claims 6 and 10 depend from Claims 1 and 7 and inherit all of the limitations of amended Claims 1 and 7, respectively. As discussed above, Kawaguchi fails to disclose all of the limitations of amended Claims 1 and 7.

Kubota is relied upon as teaching conventional timing of LCD panel signals at pages 6 and 7 of the detailed action. Applicants find no disclosure in Kubota of a timing controller providing a first control signal to the gate driver and providing the second control signal to the data driver via the signal control line and the gate line and the signal control line are disposed on the same substrate of Claims 6 and 10. Therefore, Kubota does not teach or suggest all of the limitations of Claims 6 and 10 and does not remedy the deficiencies of Kawaguchi.

As discussed above, Kawaguchi and Kubota, alone or in combination, fail to teach or suggest all of the limitations of Claims 6 and 10. Thus, *prima facie* obviousness does not exist regarding Claims 6 and 10 with respect to Kawaguchi and Kubota.

Additionally, since Kawaguchi and Kubota fail to teach or suggest all of the limitations of Claims 6 and 10, clearly, one of ordinary skill at the time of Applicant's invention would not

have a motivation to modify or combine the references, nor a reasonable likelihood of success in forming the claimed invention by the Examiner's modifying or combining the references. Thus, here again, *prima facie* does not exist. *Id.*

Thus, *prime facie* obviousness does not exist regarding Claims 6 and 10 with respect to Kawaguchi and Kubota. Applicant respectfully submits that Claims 6 and 10 are not further rejected or objected and are therefore allowable. Reconsideration, withdrawal of the relevant rejections and allowance of Claims 6 and 10 are respectfully requested.

Conclusion

All of the objections and rejections are herein overcome. In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. No new matter is added by way of the present Amendments and Remarks, as support is found throughout the original filed specification, claims and drawings. Prompt issuance of Notice of Allowance is respectfully requested.

The Examiner is invited to contact Applicants' attorney at the below listed phone number regarding this response or otherwise concerning the present application.

Applicants hereby petition for any necessary extension of time required under 37 C.F.R. 1.136(a) or 1.136(b) which may be required for entry and consideration of the present Reply.

If there are any charges due with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,

CANTOR COLBURN LLP

By: /Amy Bizon-Copp/
Amy Bizon-Copp
Reg. No. 53,993
CANTOR COLBURN LLP
Customer Number 23413
55 Griffin Road South
Bloomfield, CT 06002
Telephone (860) 286-2929
Facsimile (860) 286-0115

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